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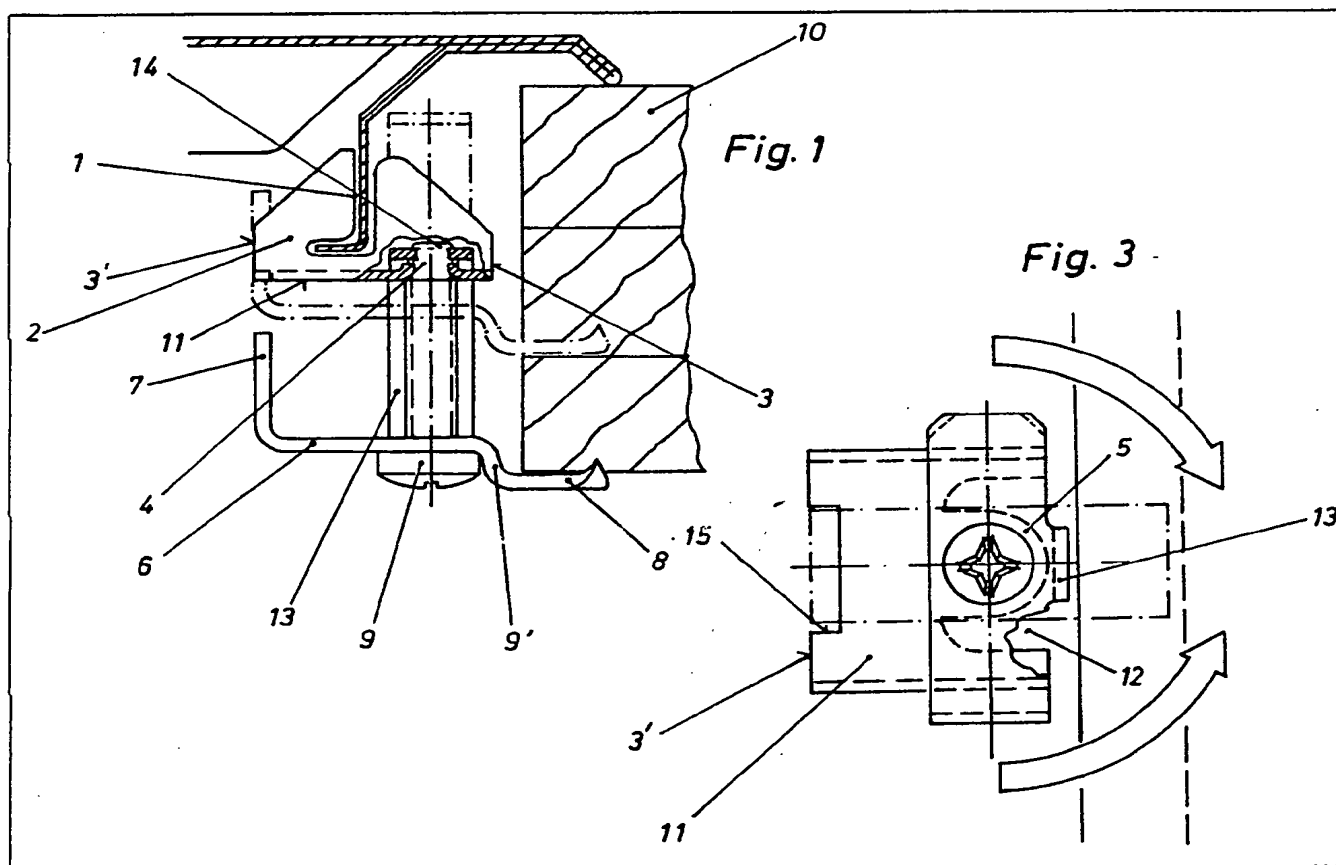
105-109 Strand

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## (54) Clamp fastening

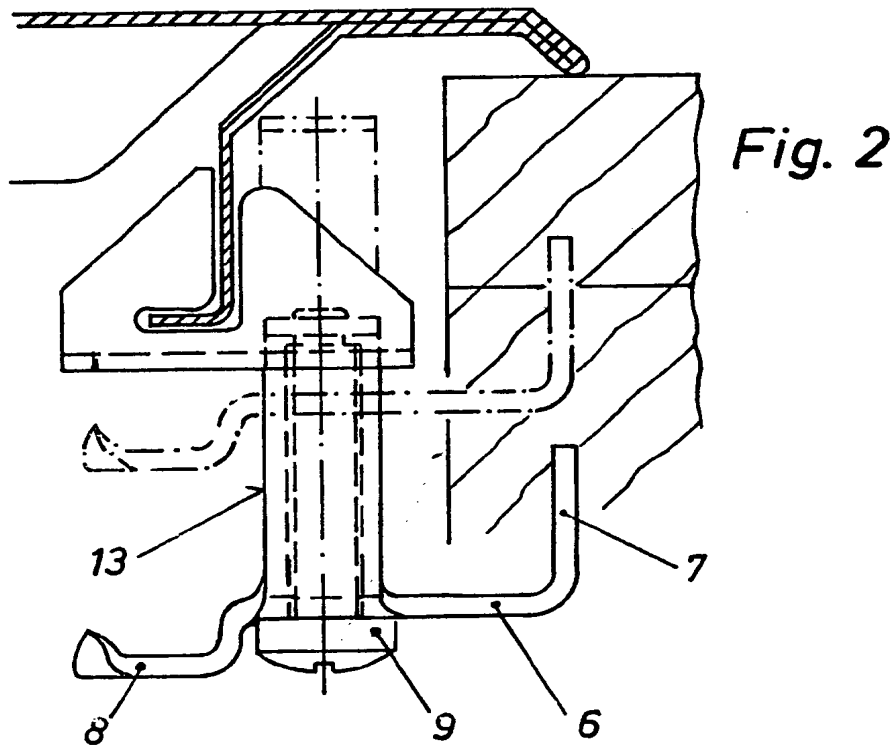
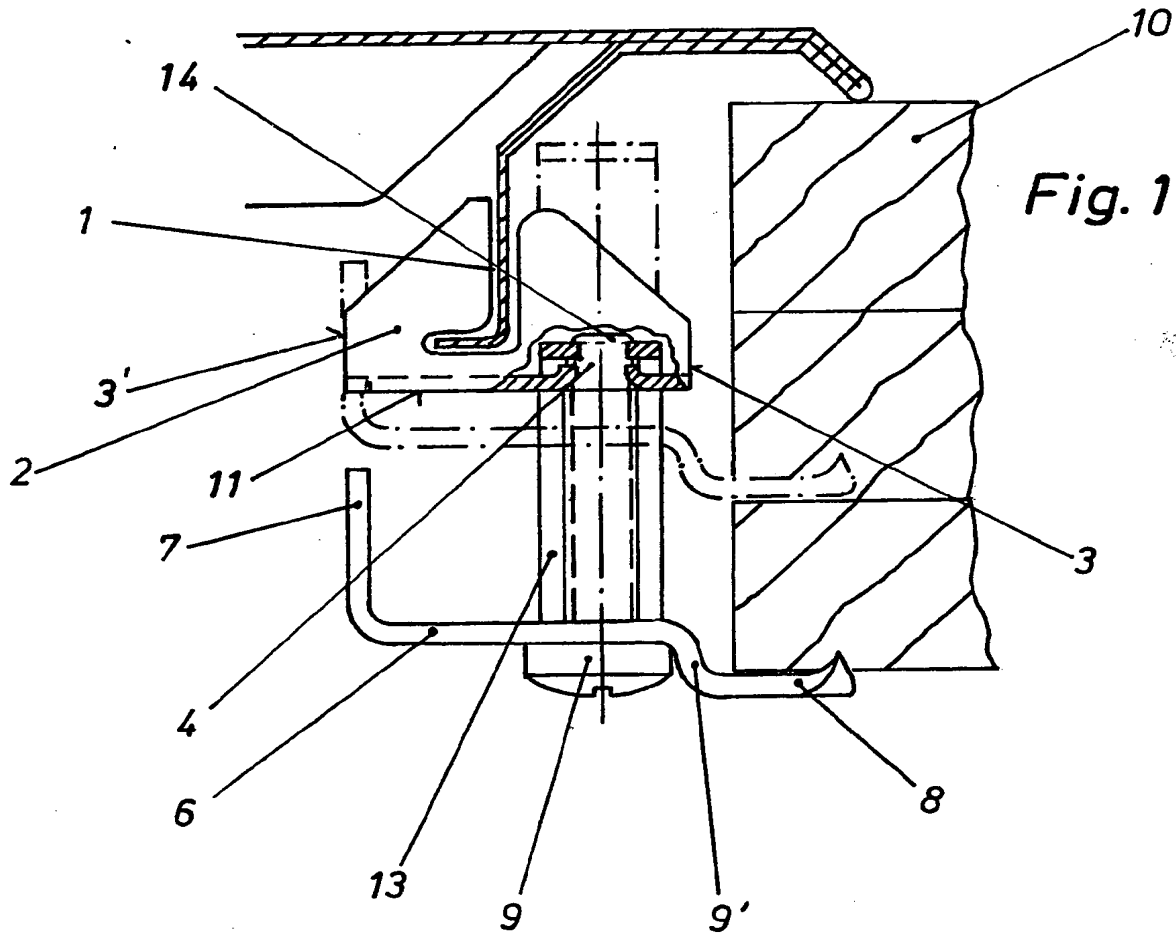
(57) A fastening for securing equipment to, for example, a kitchen worktop comprises an U-shaped fixing element (2) provided with guide slots (1) for one or more insets on the equipment and formed, centrally on the side facing the worktop (10), with a rounded off tongue (5) provided with a threaded hole (4) into which a screw (9) engages. The screw (9) serves for the guid-

ance and bracing of a clamping member (6) rotatable about the screw (9), which is provided with clamping arms (7, 8) extending on either side of the screw (9) which are bent differently in height, and thereby substantially enlarging the range of worktop thicknesses with which the unit may be used.



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*Fig. 3*

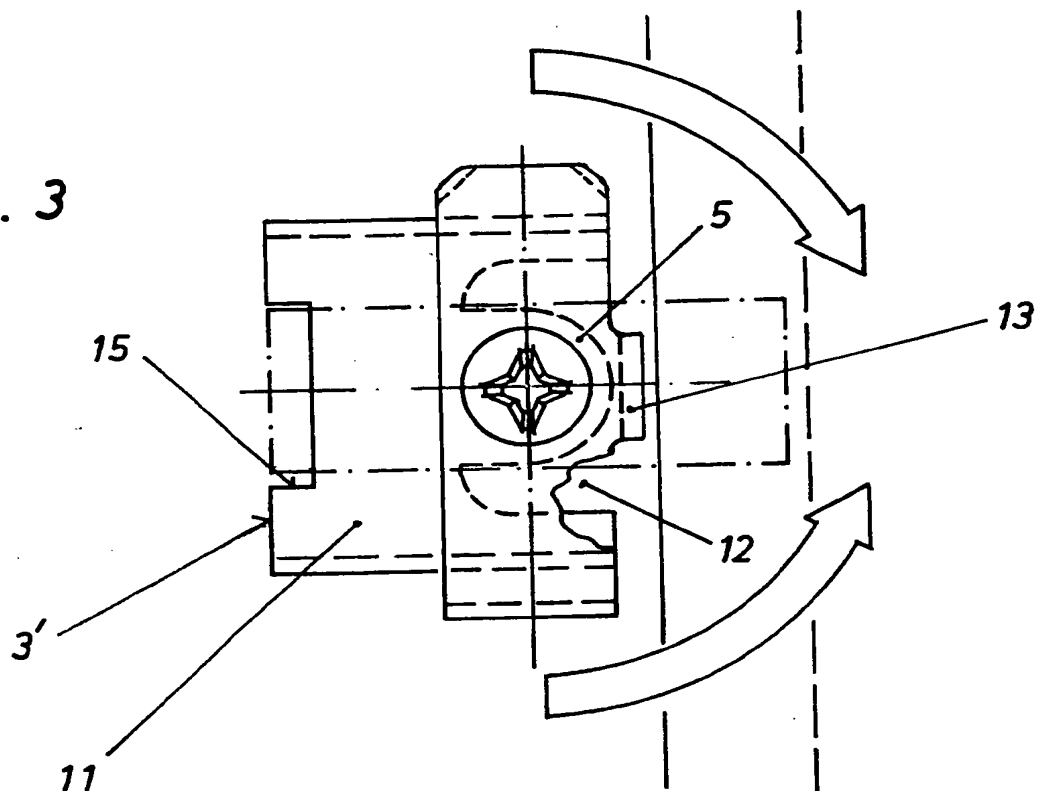
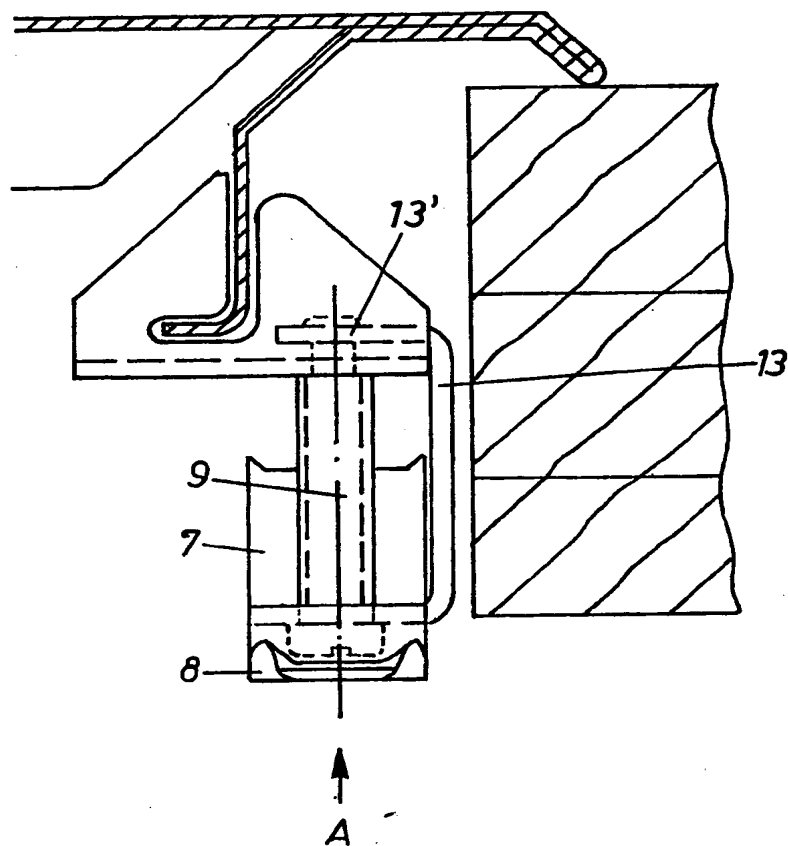


Fig. 4



## SPECIFICATION

### Fastening units

- 5 This invention relates to the securement of equipment to worktop edges, particularly equipment having at least one inset, by means of a fastening unit with a clamping mechanism. It is concerned primarily with
- 10 kitchen worktops.
- Fastening units for securing equipment to kitchen worktops and suchlike are known, which are adapted to the thickness of the kitchen worktop. For example, from German
- 15 Gebrauchsmuster No: 73 19 742, a fastening unit is known, which is pushed onto the angular inner edge of an equipment inset, consisting of a fixing element with a flexible clamping wing. This unit is only able to be
- 20 used for a predetermined thickness of kitchen worktop. The clamping wing is distorted on assembly, with the aid of a screw, so that there is a clamping fit against the worktop. In this arrangement the clamping element can
- 25 also partially project beyond the worktop on some occasions.
- It is an aim of the present invention to create a fastening element for an equipment inset in kitchen worktops, which after sliding
- 30 onto the angle flange of the equipment inset, in a chuck capacity of at least 20 mm, proceeding from worktop surfaces below 20 mm, can be fastened flush with the underside of the worktop.
- 35 According to the present invention a fastening unit is provided for securing equipment having at least one inset to the edge of a worktop, which unit comprises an U-shaped fixing element formed with guide slots for
- 40 receiving said at least one equipment inset and, on the side thereof adapted to face a said worktop edge, a tongue having a threaded hole therein; a clamping member coupled to the fixing element by means of a
- 45 screw threaded in said hole, the clamping member being rotatable about the screw axis and having arms extending on either side thereof, the arms being shaped differently to accommodate different thickness of worktop.
- 50 The arms of the clamping members are preferably bent on either side of the plane on which the member is borne by the screw to accommodate different worktop thicknesses.
- With the fastening element constructed according to the invention, through a simple
- 55 swivelling of the clamp through 180° a greater range of application is determinable; i.e., it is possible to use it both with extremely low worktop thicknesses and also worktop
- 60 thicknesses over 40 mm. In addition, the fastening element according to the invention also shows a great stability, with a smaller requirement of space, and a surface flushness coinciding with the worktop, which is particularly
- 65 important with thicker worktops.

One embodiment of the invention will now be described by way of example and with reference to the accompanying drawings wherein:—

- 70 *Figure 1* is a vertical cross-section of an unit according to the invention coupled to a worktop in the upper thickness range;

*Figure 2* is a vertical cross-section of the unit shown in Fig. 1, but coupled to a worktop in the lower thickness range;

- 75 *Figure 3* is a bottom plan view of the unit of Figs. 1 and 2, but before the clamp is pivoted into the fastening position; and

- 80 *Figure 4* is a vertical section of the unit as shown in Fig. 3.

- In the fastening unit illustrated, an U-shaped fixing element 2 is provided with guide slots 1, which are arranged directly over a connecting cross-piece 11 of the element 2.
- 85 The connecting cross-piece 11 is recessed in the centre on the side facing the worktop 10, forming a rounded-off tongue 5 with recesses 12 on both side as shown best in Fig. 3. In the tongue 5, a thread 4 is provided for a
- 90 screw 9, which serves for the guidance and adjustment of a pivotable clamp 6, which is equipped with differently bent clamping arms 7 and 8. The ends of the clamping arms 7 and 8 are provided, in a known manner, with
- 95 tooth-shaped claws. The pivotable clamp 6 also has a guiding and fastening cover plate 13, which is provided with a flange 13' which overlaps the tongue 5 and at the same time serves as bearing and mounting for the screw
- 100 9. The clamping arm 8 is offset at 9' at the level of the screw head, so that on bracing of same a flushness with the surface can be obtained. The reverse side 3' of the fastening element 2 is recessed at 15 corresponding to
- 105 the width of the clamp 6, so that the clamping arm 7 lies in this recess, when the arm 8 is used for clamping.

- As can be seen from Figs. 3 and 4, the clamping arms 8 or 7 are brought into position through pivoting the guiding and fastening cover plate 13 into position, whereby the section of the cover plate 13 lying close to the bent part 13' swivels into one of the recesses provided to the side of the tongue 5. These
- 115 recesses are constructed such that they serve at the same time as stops; i.e., the pivot arms are held aligned in the respective 90° position and aligned with the element 2.

### 120 CLAIMS

1. A fastening unit for securing equipment having at least one inset to the edge of a worktop, which unit comprises an U-shaped fixing element formed with guide slots for
- 125 receiving said at least one equipment inset and, on the side thereof adapted to face a said worktop edge, a tongue having a threaded hole therein; a clamping member coupled to the fixing element by means of a
- 130 screw threaded in said hole, the clamping

member being rotatable about the screw axis and having arms extending on either side thereof, the arms being shaped differently to accommodate different thicknesses of work-

5 top.

2. A fastening unit according to Claim 1 wherein the arms of the clamping members are bent on either side of the plane on which the member is borne by the screw to accom-

10 modate different worktop thicknesses.

3. A fastening unit according to Claim 1 or Claim 2 including a cover plate which extends from the end of the screw around the tongue, and to the body of the clamping

15 member, the fixing element is formed with recesses on either side of the tongue in which the cover plate can be received.

4. A fastening unit according to any preceding Claim wherein the guide slots are

20 arranged centrally on the fixing element.

5. A fastening unit for securing equipment to the edge of a worktop substantially as described herein with reference to the accompanying drawings.

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